REMARKS

This is in response to the Office Action dated August 30, 2010, in which claims 1-8, 10-18 and 20-22 were rejected. This is also in response to an interview with the Examiner that was held on November 22, 2010. With this Amendment, claims 1, 11 and 20 have been amended and the remaining claims are unchanged in the application. Claims 9 and 19 were previously cancelled. No new matter has been added to the application as a result of the claim amendments. Applicants respectfully request reconsideration and allowance of all pending claims.

I Interview Summary

The interview on November 22, 2010 included Examiner Mujtaba Chaudry, inventor William Radich and the undersigned. During the interview, a Proposed Amendment, which was previously sent to the Examiner, was discussed. Specifically, the inventor and the undersigned pointed out differences between amended claim 1 and Kavcic et al., U.S. Patent No. 6,438,180 ("Kavcic"). Examiner Chaudry indicated that further clarification of the "transition jitter variable" included in claim 1 would help overcome the cited reference. The inventor suggested including that the transition jitter variable represents, for each data symbol, a non-integer shift in discrete time with respect to a symbol rate clock. As discussed during the interview, paragraph 8 in the specification, which includes Equation 2 that has a transition jitter variable, is an example of support for the amendment. Paragraph 8 of the specification is included below.

> Assume a symbol-rate sampled, discrete-time equivalent, equalized, transition response is given by the sequence g_k, so that the combined effects of wide-band additive noise and media jitter can be modeled at the input to a detector as the received sample
>
> $$r_k = \sum_l b_l \, g(k - l - \gamma_l) + n_k$$
>
> Equation 2
>
> In Equation 2, γ_l is the normalized, random jitter parameter associated with the l^{th} transition symbol b_l and n_k represents the contribution of wide-band, additive, Gaussian noise with variance σ_n^2.

Examiner Chaudry indicated that he would have to conduct a further search upon receiving an Amendment with the claim modifications suggested above. No agreement on final claim language was reached.

II. Claim Rejections Under 35 U.S.C. §112

Claims 1-8, 10-18 and 20-22 were rejected under 35 U.S.C. §112, second paragraph, as allegedly being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The Office Action first alleges that "developing a statistical model" included in the claims is not clear because it is uncertain as to where the statistical model is developed. With this Amendment, claim 1 has been amended to replace the allegedly ambiguous language regarding "developing a statistical model" with "programming the detector with a statistical model." (Emphasis Added.) This obviates the alleged ambiguity.

Further, claim 1 has been amended to include "a transition jitter variable that represents, for each data symbol, a non-integer shift in discrete time with respect to a symbol rate clock and that relates transition jitter to signal sample noise in an amplitude domain." (Emphasis Added.) As discussed with the Examiner during the interview, this element lacks ambiguity and is supported by paragraph 8 of the specification. Thus, the rejection should be withdrawn.

Remaining independent claims 11 and 20 also include a detector with "a statistical model having a transition jitter variable that represents, for each data symbol, a non-integer shift in discrete time with respect to a symbol rate clock and that relates transition jitter to signal sample noise in an amplitude domain." Accordingly, based on the foregoing, these claims do not lack clarity. Thus, the rejection of claims 1-8, 10-18 and 20-22 based on 35 U.S.C. §112, second paragraph, should be withdrawn.

II. Claim Rejections Under 35 U.S.C. §§102 and 103

On page 3 of the Office Action, claims 1, 2, 7, 8, 11, 17, 18 and 20 were rejected under 35 U.S.C. §102(b) as being anticipated by Kavcic et al., U.S. Patent No. 6,438,180 ("Kavcic").

On page 7 of the Office Action, claims 3-6, 10, 13-16 and 21-22 were rejected under 35 U.S.C. 103(a) as being unpatentable over Kavcic.

As indicated above, with this Amendment, independent claims 1, 11 and 20 have been amended in accordance with the discussion during the interview to indicate that the transition jitter variable represents, for each data symbol, a non-integer shift in discrete time with respect to a symbol rate clock.

In contrast, Equation 11 of Kavcic, which is the basis of Kavcic's computations, treats noise as a non-stationary Gauss-Markov process and has no transition jitter variable that represents, for each data symbol, a non-integer shift in discrete time with respect to a symbol rate clock. In essence, Kavcic does not teach or expressly or impliedly suggest "a statistical model having a transition jitter variable that represents, for each data symbol, a non-integer shift in discrete time with respect to a symbol rate clock and that relates transition jitter to signal sample noise in an amplitude domain." Thus, claims 1, 11 and 20 are believed to be allowable. Claims 2-8 and 21 depend from claim 1 and claims 12-18 and 22 depend from claim 11. Thus, claims 2-8, 12-18 and 21-22 are believed to by allowable at least by virtue of their dependence from allowable independent claims 1 and 11, respectively.

In view of the foregoing, Applicant respectfully requests reconsideration and allowance of pending claims 1-8, 10-18 and 20-22. Favorable action upon all pending claims is solicited.

The Director is authorized to charge any fee deficiency required by this paper or credit any overpayment to Deposit Account No. 23-1123.

Respectfully submitted,

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